

CLAIMS:

1. An air-bag unit adapted to be positioned on the floor pan of a motor vehicle in the foot-well, to be located beneath the feet of an occupant of the vehicle, the air-bag unit having an air-bag, and having an upper cover located above the air-bag, the unit being such that on inflation of the air-bag the cover is lifted from its initial position to an elevated position the upper cover comprising two sections inter-connected by a hinge-line, the two sections being adapted such that on inflation of the air-bag the part of the cover adjacent the hinge-line is elevated to a greater extent than the portions of the cover which are remote from the hinge-line.
2. A unit according to Claim 1 wherein a pair of attachment elements are provided, the attachment elements each being connected to one part of the upper cover and being adapted to be connected to part of the motor vehicle to restrict upward movement of the said part of the cover.
3. A unit according to Claim 1 or Claim 2 wherein the cover comprises two sections, in the form of a first section adapted to be substantially horizontal and the second section adapted to be inclined, the air-bag lying under the second section presenting a relatively large chamber, and the air-bag lying under first section presenting a plurality of separate chambers.
4. A unit according to Claim 3 wherein each of the separate chambers is a tapering chamber.
5. A unit according to Claim 3 or 4 wherein the inclined section of the cover is provided with a slit separating the inclined section into two regions, one region being adapted to lie on a foot-rest.

6. A unit according to any one of the preceding Claims wherein the cover is provided with reinforcing means, the reinforcing means extending transversely of the cover.

7. A unit according to any one of Claims 1 to 5 wherein the cover is provided with reinforcing means to resist deformation of the cover, there being more or stronger reinforcing means in the region of the cover adapted to lie under the heel of an occupant of the vehicle than in other areas of the cover.

8. A unit according to Claim 7 wherein the reinforcing means extend transversely of the cover.

9. An air-bag unit adapted to be positioned on the floor pan of a motor vehicle in the foot-well, to be located beneath the feet of an occupant of the vehicle, the air-bag unit having an air-bag, and having an upper cover located above the air-bag, the unit being such that on inflation of the air-bag the upper cover is lifted from its initial position to an elevated position the upper cover being provided with reinforcing means, the reinforcing means extending transversely of the cover to provide the cover with substantial transverse rigidity.

10. An air-bag unit adapted to be positioned on the floor pan of a motor vehicle in the foot-well, to be located beneath the feet of an occupant of the vehicle, the air-bag unit having an air-bag, the unit having an upper cover located above the air-bag, the unit being such that on inflation of the air-bag the upper cover is lifted from its initial position to an elevated position the upper cover being provided with reinforcing means to resist deformation of the cover, there being more or stronger reinforcing means in the region of the cover adapted to lie under the heel of an occupant of the vehicle than in other areas of the cover.

11. A unit according to Claim 10 wherein the air-bag is of metal.

12. A unit according to any one of Claims 6 to 11 wherein the reinforcing means comprise thickened portions of the cover.

13. A unit according to any one of Claims 6 to 11 wherein the reinforcing means comprise integral elements of a reinforcing material located within the cover.

14. A unit according to any one of the preceding Claims wherein the air-bag is secured to the cover by adhesive.

15. A unit according to any one of Claims 1 to 13 wherein the cover is provided with integrally formed tongues, the air-bag being connected to the cover by means of elements provided on the air-bag which engage the said tongues.

16. A unit according to any one of the preceding Claims wherein the cover forms part of a housing that contains the air-bag.

17. A unit according to any one of Claims 1 to 15 wherein the cover rests on the air-bag.

18. A load distribution element to be mounted in a vehicle beneath at least one foot of an occupant of the vehicle the element comprising a plate, the plate having a first region of a predetermined strength and at least one further region of a greater strength, the region of greater strength comprising at least a first area to be located beneath a predetermined part of said one foot.

19. An element according to Claim 18 wherein the said part of the foot is the heel of the foot.

20. An element according to Claim 19 wherein said first area is dimensioned to be located beneath the heels of two feet of the occupant.

21. An element according to Claim 19 or 20 wherein the further region incorporates a second area which extends adjacent one edge of the element to be located under one side of said one foot.

22. An element according to Claim 19 or 20 wherein the further region incorporates two further areas which extend adjacent two opposed sides of the element to lie under side parts of said two feet.

23. An element according to Claim 18, 19, 20 wherein the element is substantially rectangular and the further region incorporates one area which extends across the element which is spaced from said first area.

24. An element according to any one of Claims 18 to 23 wherein the element includes at least one relatively weak area which has a strength which is less than said predetermined strength.

25. An element according to Claim 24 as dependant on Claim 21 wherein the relatively weak area is adjacent the second area to be located under the other side of said foot.

26. An element according to Claim 24 as dependant upon Claim 22 wherein there are two said relatively weak areas located respectively adjacent said two further areas to lie under the other side parts of said feet.

27. An element according to any one of Claims 18 to 26 provided with padding to be located between the element and the floor of a vehicle.

28. An element according to any one of Claims 18 to 26 provided with an inflatable air-bag to be located between the element and the floor of a vehicle.

29. An element according to Claim 28 wherein the element forms part of the upper cover of a housing containing the air-bag.

30. An element according to Claim 29 wherein the housing is a damp-proof sealed housing.

31. An element according to Claim 29 or 30 wherein the element is connected to the rest of the upper cover by a hinge-line.